

## California and Federal Milk Marketing Orders *A Comparison*

Since the early 1930s, milk pricing in the U.S. has been subject to regulation. The federal government, through the U.S. Department of Agriculture (USDA), regulates the price of about 70 percent of the marketed Grade A milk. California is the principal milk production area that does not fall under the jurisdiction of the federal government. The California Department of Food and Agriculture (CDFA) has maintained California's own state milk marketing order since the passage of the Young Act in 1935. This briefing paper maintains a neutral view of the possible inclusion of California in the federal system. It is intended to merely compare and contrast the two milk pricing and pooling systems.

### General Overview

To promote stability in the dairy industry, the federal government and some individual states have established milk marketing programs. These programs establish minimum prices, based on ultimate utilization, that processors must pay for market grade milk (Grade A milk) received from dairy farmers. Minimum prices do not necessarily follow state boundary lines because prices apply to regions in which milk and dairy products are marketed, commonly referred to as "marketing areas".

California is the most conspicuous area that is not part of the federal milk marketing order (federal order) system and maintains its own milk marketing program. Currently, two marketing areas constitute California's milk marketing program: Northern California and Southern California. Each marketing area has a separate but essentially identical Stabilization and Marketing Plan. Each plan provides formulas for pricing five classes of milk under the auspices of the CDFA. Similarly, there are four classes of milk in the 10 federal orders under the auspices of the USDA:

California	Federal Order	Description - milk used in:
Class 1	Class I	Fluid products.
Class 2	Class II	Heavy cream, cottage cheese, yogurt, and sterilized products.
Class 3		Ice cream and other frozen products.
Class 4a	Class IV	Butter and dry milk products, such as nonfat dry milk (NFDM).
Class 4b	Class III	Cheese, other than cottage cheese, and whey products.

### Class Prices

Milk consists of four principal components: butterfat (fat), protein, lactose (sugar) and fluid carrier. For all classes in California and Classes II and IV in federal orders, protein and lactose are combined into a single component: solids-not-fat (SNF).

In California, all five classes of milk use component pricing. In federal orders, Class II, for six of the 10 orders, Class III, and Class IV use component pricing. In federal orders, component pricing does not apply to Class I products, nor to Class II products in four

federal orders. In these cases, Class I and II are priced on a hundredweight of standardized milk, i.e., milk containing 3.5% fat. All California and federal order class prices are based on the location of the receiving plant and not the location of dairy farms.

The two regulatory systems both use commercial market prices for butter, NFDM, Cheddar cheese and dry whey. These commodity prices are adjusted by product yields and product manufacturing cost allowances, which are established via public hearings. Fully annotated diagrams of the specific California pricing formulas can be found in “*California Milk Pricing Formulas*”, DMB–SP–108 of the series on California milk pricing and pooling.

For California processors and processors regulated by federal orders, minimum prices that processors must pay for the different classes of milk are determined by valuing finished dairy products on wholesale markets. These prices are updated regularly by use of formulas to reflect changing market conditions for dairy products. In California, Class 1, 4a and 4b farm prices are adjusted monthly according to their pricing formulas and the prevailing dairy commodity prices. Class 2 and 3 prices are adjusted every two months. All federal order class prices are adjusted monthly.

### *Differences in Timing of Price Announcements*

Minimum prices may be announced in advance or retroactively. The California Class 1, 2 and 3 and federal order Class I prices are priced in advance of when the minimum prices apply. The California Class 4a and 4b prices and the federal Class III and IV prices are announced after-the-fact. The federal Class II price uses advanced pricing on the SNF component but after-the-fact pricing for the fat component.

California		Federal Order	
Class 1	by 10th of the prior month	Class I	by 23rd of the prior month
Class 2	by 1st of the month	Class II	by 23rd of the prior month for skim/SNF
Class 3	by 1st of the month		by 5th of the following month for fat
Class 4a	by 1st of the following month	Class IV	by 5th of the following month
Class 4b	by 1st of the following month	Class III	by 5th of the following month

### *Differences in Commodity Price Data*

Price formulas that are used in California and in federal orders draw commodity price data from a variety of sources:

	California	Federal Order
Butter	CME	NASS
NFDM	CWAP	NASS
Cheese	CME block	NASS block & barrel
Dry whey	DMN-WDW	NASS

CME - Chicago Mercantile Exchange  
NASS - National Agricultural Statistics Service  
NFDM - Nonfat Dry Milk  
CWAP - California Weighted Average Price  
DMN - Dairy Market News  
WDW - Western Dry Whey

use an array of applicable time periods:

California Class 1	26th of second prior month to the 10th of prior month
California Class 4a and 4b	26th of prior month to the 25th of current month
Federal Class I	latest two weeks available by the 23rd of prior month
Federal Class III and IV	latest four (five) weeks available by the 5th of following month

and use different commodities for different classes:

California	Federal Order	
Class 1	Class I	higher of butter/NFDM or cheese/dry whey plus differentials
Class 2 & 3		Class 4a plus differentials
	Class II	Class IV plus differential
Class 4a	Class IV	butter and NFDM
Class 4b	Class III	Cheese and dry whey

California Class 1 and Federal Class I — To calculate the California Class 1 price, wholesale price data from the 26<sup>th</sup> of the second prior month to the 10<sup>th</sup> of the prior month are used. The Class 1 price uses a “higher of” concept to develop a base price, and as such, data must be accumulated for butter, nonfat dry milk (NFDM), Cheddar cheese and Western dry whey (WDW). Cheddar cheese and butter use the simple average of prices released by the Chicago Mercantile Exchange (CME). While the CME releases prices for both 500 pound barrels and 40 pound blocks, only 40 pound block Cheddar cheese prices are used in the Class 1 formula calculation. The NFDM price is the California weighted average price (CWAP) received by California NFDM plants as determined by CDFA. The Western dry whey (WDW) prices are those published by Dairy Market News (DMN), a weekly summary of dairy market activity produced by USDA’s Agricultural Marketing Service. The dry whey prices are simple averages of the Western dry whey (WDW) mostly prices. The nonfat dry milk (NFDM) and Western dry whey (WDW) prices are the two most current weekly average prices available on the 10<sup>th</sup> of the prior month.

The federal Class I pricing formula also uses a “higher of” concept to develop a price base. The Class I price relies on weekly wholesale price data published by the National Agricultural Statistics Service (NASS) instead of CME data. As of the 23<sup>rd</sup> of the prior month, the most recent two weeks of commodity price data are used. The federal Class I pricing formula, like the California Class 1 pricing formula, uses price data for Cheddar cheese, dry whey, butter and nonfat dry milk. In contrast, the federal Class I pricing formula also includes price data for 500 pound barrels of Cheddar cheese.

California Class 2 and 3 and federal Class II — The California Class 2 and 3 prices, because of their inherent link to the Class 4a pricing formula, do not use any commodity price directly. Instead the pricing formulas use the simple averages of the fat and SNF prices from the second prior month and the prior month to arrive at two base component prices. Fixed differentials are added to these bases to arrive at the appropriate class prices. Clearly, because of the link to the Class 4a pricing formula, only the CME butter price and the California weighted average price (CWAP) for nonfat dry milk are relevant for Classes 2 and 3.

The federal Class II price uses a similar approach with differentials to align Class II prices with federal Class IV prices, but the Class II price is changed every month. That is to say, the procedure of using the average of two months of component price data is not used in federal milk markets.

California Class 4a and 4b and Federal Class III and IV — To calculate the California Class 4a and 4b prices, wholesale price data from the 26<sup>th</sup> of the prior month to the 25<sup>th</sup> of the current month are used. For the Class 4a price, data must be accumulated for butter and NFDm; for Class 4b, data for Cheddar cheese, bulk butter and Western dry whey (WDW) are needed. Simple averages for 40 pound block Cheddar cheese and butter are calculated using price data released by the CME. The NFDm price is the monthly California weighted average price (CWAP) received by California NFDm plants during the 26<sup>th</sup> to the 25<sup>th</sup> time period. The Western dry whey (WDW) prices used in the Class 4b pricing formula are those published by Dairy Market News (DMN), a weekly summary of dairy market activity produced by USDA's Agricultural Marketing Service. The Class 4b formula requires the use of the simple average of the Western dry whey (WDW) mostly prices contained in the weekly reports published from the 26<sup>th</sup> of the prior month to the 25<sup>th</sup> of the current month.

The Class III and IV prices rely on weekly wholesale price data published by NASS instead of CME data. Commodity price averages are released weekly, and the release date determines which data will be included for the price calculation. The federal system uses any weekly average released prior to the 5<sup>th</sup> of the month following the month in which the price will apply. For example, NASS price data from October 23 to October 28 that was released on November 3 would be used in the October price calculation. The federal Class III and IV pricing formulas, like the California Class 4a and 4b pricing formulas, use data for Cheddar cheese, dry whey, butter and NFDm. However, the federal pricing formulas also include price data for 500 pound barrels of Cheddar cheese.

### *Using Differentials to Set Class Prices*

As mentioned above, some classes of milk in both California and in federal orders use differentials to establish minimum milk prices.

	Differentials per Hundredweight			
California Class 1	-\$0.12	To	\$0.15	
Federal Class I	\$1.60	To	\$4.30	all federal orders
	\$1.60	To	\$2.35	orders adjacent to California
California Class 2 & 3	\$0.64	To	\$0.92	
Federal Class II	\$0.70			

There are differentials between the California Class 1 farm price and the California Class 1 base price (called the Commodity Reference Price or CRP). Currently, these differentials are set at -\$0.12 to +\$0.15 per hundredweight, respectively, for Northern California and Southern California.

Federal Class I prices are derived by adding fixed differentials to a base price. Differentials range from \$1.60 to \$4.30 per hundredweight and vary by county of plant location throughout the U.S. In those states adjoining California, the differentials range in value

from \$1.60 to \$2.35 per hundredweight. In general, the differentials are highest in the Southeast, Northeast, and South Central states and lowest in the Upper Midwest and Great Basin.

The California Class 2 and 3 component prices are established by adding differentials to the Class 4a component prices, and the specific amounts of the differentials are contained in each marketing area's Stabilization Plan. These Class 2 and 3 differentials range in value from \$0.64 to \$0.92 on a hundredweight equivalent basis. The differentials for Classes 2 and 3 vary by milk component, i.e., fat or SNF and by plant location, i.e., Northern California or Southern California.

Federal Class II prices are established using a single differential. This \$0.70 differential is added to the Class IV price on a hundredweight equivalent basis.

### **Milk Pooling, Blend Prices and the Quota System**

By itself, minimum producer price regulation imparts stability to the dairy industry, but it does not guarantee all producers the same price. Prior to government pooling regulation of the dairy industry, producers and processors maintained contractual arrangements, and the price received by producers depended on the products processed by the plant to which they shipped. Thus, a producer who shipped to a plant with high fluid (Class 1) usage typically received a higher price than a producer who shipped to a plant with high manufacturing (Class 4a or 4b) usage. The inequity resulted in destructive competition for fluid contracts among producers and contributed to market instability. The concept of pooling of milk receipts was instituted to help correct these problems.

When comparing California's state marketing order with the federal order system, many elements of processor obligations and producer payments are similar. Each handler submits a monthly report to the milk pooling division of the regulatory agency. These reports indicate the amount of milk purchased from producers and from other handlers and the quantities used in the various classes. The gross value of the pool is determined by multiplying each class usage by its appropriate class price across all handlers in the pool and then summing the resulting values.

#### *Blend Prices and Pool Prices*

In the federal system, revenue from milk sales is pooled to establish an announced uniform blend price within a marketing order. Individual producers may receive less than the announced blend price based on location differentials. (Federal order location differentials are the same as the Class I differentials.) As in federal orders, California processors are obligated to a central milk revenue pool when they purchase milk from producers or cooperatives, but unlike federal orders, the California milk pooling system does not generate a single blend price.

As mandated in the California Pooling Plan for Market Milk, producers are paid based upon their allocation of quota, base and overbase at prices that reflect the pool-wide utilizations of all classes of milk. The monthly quota and base amounts are computed for each producer to the extent these amounts are produced. The maximum monthly quota amount is determined by the current quota allocation, and the maximum monthly base is determined by the difference between the historical production base and quota. Any milk

produced in excess of the sum of these two figures constitutes overbase production. Collectively, the quota, base and overbase prices are referred to as “pool prices”.

From 1969 through 1993, farm prices and utilization of Classes 1, 2 and 3 generally determined the quota price. Likewise, the overbase price was primarily influenced by the Class 4a and 4b farm prices. A temporary provision enacted in 1993 and made permanent in 1994 established a fixed differential such that the quota price is set \$1.70 per hundredweight higher than the base and overbase prices. Revenue above that which is required to fund the quota premium, i.e., the \$1.70 differential, is shared equally among quota, base and overbase production.

The announced quota price may be adjusted further by other factors, such as regional quota adjusters (RQAs) which depend on farm location and transportation allowances and credits which help to subsidize milk movements to higher usage plants. These additional factors that add to or subtract from pool revenues are discussed more in the section entitled, “*Incentives to Supply Milk Markets*”.

### *Handlers and the Pool*

In California, handler obligation statements are computed and mailed to each pool handler by the 28th of each month. These statements take into account the handler's class usage, class prices and the gross amount the handler is directed to pay producers for selling milk to the handler. If the total value charged to the handler by the pool is greater than the amount the handler owes producers for their milk, the handler pays the difference into the pool equalization fund. However, if the reverse is true, the handler receives the difference from the equalization fund. This feature is identical to the producer settlement funds maintained in all federal orders and enables all handlers to pay each producer a designated price regardless of how the milk was utilized.

### Depooling

Not all revenue generated from milk sales is channeled through producer pools. In federal orders, manufacturing plants can opt out of the pool, referred to as depooling. A plant would consider depooling when milk price economics dictate it, i.e., when the manufacturing plant's credit from the pool is lower than the minimum prices that it must pay into the pool. This scenario would result in the manufacturing plant paying money into the pool, rather than drawing money out of the pool. It is possible for California manufacturing plants to depool; however, they generally will not if they are receiving any milk from producers who own quota. Regulations stipulate that any producer who owns quota must ship to a pool plant during a 60 day period or risk losing their quota.

Another important distinction between the two systems is that a plant in a federal order that opts to depool does not have to pay the announced minimum price for Grade A milk received. However, in California, a plant that depools must continue to pay the announced minimum price for Grade A milk received. Thus, in federal orders, depooling eliminates both the pooling and minimum pricing regulations, but in California, depooling eliminates only the pooling regulations.

Because of increases in depooling by plants, both CDFA and USDA have changed their regulations to limit a plant's ability to depool and repool. In California, once a plant

depools, it must wait twelve months before it can repool. Likewise, once repooled, twelve months must pass before depooling. In federal orders, plants can still depool at any time; however, when they repool, only part of the milk processed can be pooled. The proportion of milk pooled increases over time provided the plants do not again depool.

### Producer–Distributors

Producer–distributors (PD), also called producer–handlers (PD), represent another exception of revenue from milk sales being channeled through producer pools. A PD is characterized by simultaneous ownership of both the production and processing facilities. Qualifying PDs located in federal orders were exempt from paying into the pool for their Class I production and are not limited in terms of how much of their own production can be processed and marketed. Recently however, qualification standards have been changed in several western federal orders. A PD loses their exemption if they process more than three million pounds of milk per month. As a result, several PDs in federal orders that were formerly exempt are now being pooled on a federal order.

In California, fully exempt PDs (Option 66 PDs) are similarly not responsible to the pool for any of their Class 1 production, but there are significant restrictions on production and sales. Option 70 PDs, another PD designation in California, are not responsible to the pool for the Class 1 production that is covered by any exempt quota owned by the PD. They have no restrictions on how much milk they can purchase for processing. Finally, revenue from milk brought in from outside a federal order is generally included as part of that order's pool. In California's state order, a plant accepting milk from sources outside California receives a credit toward their pool obligations. The amount of the credit depends on the plant's utilization of milk blended.

### **Incentives to Supply Fluid Markets**

The virtues of pooling receipts from milk sales notwithstanding, the elimination of contractual arrangements between producers and handlers removed the unambiguous incentive that existed for producers to ship their milk to fluid plants or other higher class usage plants. Instead, because producers are responsible for the cost of the haul from ranch-to-plant, they were inclined to ship to local plants. In general, these tended to be manufacturing plants and not fluid milk plants. As dairy locations and milk movement patterns evolved, fluid milk handlers were faced with the increasingly difficult task of attracting adequate milk supplies, a responsibility that could be critically important during times of low milk production.

Location differentials have been used for years to provide producers with the proper economic signals to move milk to its highest use category. Federally regulated milk markets have had and continue to have location differentials. (Federal order location differentials are the same as the Class I differentials.) Location differentials are included in the calculation of payments to producers and are based on the location of the plant of first receipt, not the location of the dairy farm itself. The further a receiving plant is from the main metropolitan area, the lower the location differential, which would decrease a producer's blend price relative to what was announced for the order. The blend price that is announced for each federal order applies to producers delivering milk to the main metropolitan area within the order.

When milk pooling was established in California in 1969, location differentials were established to encourage the movement of only quota milk to Class 1 plants. Over time, overbase milk became a larger and larger share of the milk produced by individual producers. Consequently, location differentials that applied solely to quota milk were no longer able to ensure that adequate milk supplies were made available to Class 1 plants. In 1982, location differentials were replaced by transportation allowances and regional quota adjusters (RQAs). Transportation allowances partially compensate producers for the cost of hauling milk from a producer's ranch to qualified plants in designated receiving areas. The funds for transportation allowances are drawn from the producer pool. In order to be designated as a qualifying plant, a processor must be located in specified deficit areas and must process more than 50 percent of its volume as Class 1, Class 2, and/or Class 3 products. The purpose of RQAs is less transparent because they do not provide any direct incentive to move milk to Class 1 plants. They were developed to address equity issues arising out of the elimination of the location differentials. The money collected from quota holders in the form of RQAs does not fund transportation allowances. Rather, these revenues become part of the general producer pool.

In addition to the transportation allowances, California uses two other instruments to encourage the movement of milk to Class 1 plants — call provisions and transportation credits. Call provisions were instituted in 1979, and transportation credits were introduced in 1981. Call provisions in California function in a similar manner to those in federal orders by essentially bestowing a ranking system for milk use when insufficient milk supplies are available to meet the demand for fluid milk. Basically, call provisions require that manufacturing plants release a portion of the milk received upon the request of a Class 1 plant. Transportation credits were introduced to relieve the cost of interplant shipments. At one time Class 1 area differentials, which were the differences in hundredweight prices among marketing areas, were able to cover the cost of moving milk plant-to-plant. However, with marketing area consolidation and improvements in relative costs of moving milk ranch-to-plant, Class 1 area differentials were no longer sufficient to cover the cost of plant-to-plant milk movement. Transportation credits reduce the obligation of handlers to pay for the cost of hauling milk assigned to Class 1 usage from plants in designated supply counties to plants in designated deficit counties.

### **Marketing Areas**

CDFA and USDA establish, modify and consolidate marketing areas in order to achieve the objectives of milk pricing and milk pooling. Marketing areas are established regionally where milk production and marketing are similar. When marketing areas were first established in the 1930's, the ability to ship milk was limited due to its perishability and bulkiness, undeveloped processing and packaging techniques, the lack of an interstate highway system, and traditional distribution methods. Furthermore, milk supply areas tended to be small and disperse. These factors contributed to localized milk production, processing and distribution.

In the mid 1950's, there were 37 marketing areas in California, each typically composed of one to three counties or sections of counties. There were also areas of the state that were unregulated. Marketing areas were consolidated and unregulated areas were brought into existing marketing areas as technology improved the ability to ship bulk and packaged milk greater distances. Currently, there are two marketing areas in California. The northern section of Ventura County is the lone remaining unregulated area in the state.



This same pattern of consolidation has also occurred in federal orders. In 1960, there were 80 federal orders. Currently, there are only 10 federal orders.

### **Hearing Processes to Amend Marketing Orders**

To this point, this briefing paper has shown that the California and federal milk marketing order regulatory systems share many functional similarities, although the means by which the purposes of the regulation are met differ considerably. The processes by which regulations are amended continue this theme. The most fundamental difference concerns the speed at which the amendment process moves with California's process containing fewer steps and less time involved from the time a proposal is received to the time an amended plan may be declared effective.

#### *Federal Hearing Process*

In the federal order system, a formal rulemaking procedure has been used extensively in the development and amendment of federal orders. Formal rulemaking has the appearance of a judicial process, involving a hearing with a judge and cross-examination of witnesses. Handlers, producers or other interested parties may submit a proposal for amending an existing order, but the Secretary has the discretion to accept or deny all such requests. Hearings may also be initiated by other means. For example, the Secretary is required to hold a hearing in regard to any proposal for amendment supported by one-third or more of the market's producers. A hearing may also be called by USDA whenever an amendment to a marketing order is necessary to carry out the declared policy of the 1937 Agricultural Marketing Agreement Act.

Upon receipt of a proposal to amend the marketing order, USDA initiates a preliminary investigation of the facts and circumstances in the market to assess the need for an amendment to the order. In the pre-hearing study, marketing specialists from USDA consult with handlers, producers and hold conferences with interested parties to discuss marketing problems. If the investigation reveals the need for an amendment, a notice of public hearing is issued. The length of time from the receipt of the proposal until the date of the hearing varies with the type of action required in the proposal, but most hearings convene within 90 days after an affirmative recommendation for a hearing. Proposals not covered by the hearing notice may not be discussed at the hearing.

At the hearing all producers, handlers, consumer groups or other interested parties are given the opportunity to present facts, views and opinions of the proposed amendments. Cross-examination of witnesses by the judge, attorneys, marketing specialists, or other interested parties is allowed. Except for official documents, the public hearing is the sole source of information that can be used by USDA for analyzing issues. After the public hearing, a recommended decision is issued by the Secretary. Interested parties are given a period of time, usually 30 days, in which to review and submit comments regarding the recommended decision. A final decision is presented to the affected producers after the Secretary has reviewed the comments submitted in response to the recommended decision. Under market-wide pooling, two-thirds of the producers must vote in favor of the final decision to amend the order to make it effective. The producers must accept or reject entirely the provisions that are based on the public hearing. Therefore, a vote that fails to

garner sufficient support brings an end to the entire order. This rule limits the ability of producers to choose the most appealing amendments selectively.

### *California Hearing Process*

California's amendment process is analogous fundamentally but is considerably more streamlined than that of the federal system. Within 15 days after receiving a petition from an interested party (producers, cooperative, processor, consumer), CDFA must accept or deny a hearing to amend the stabilization and marketing plans. A petition that represents the sentiments of 55 percent of all producers and not less than 55 percent of the total production of the marketing area results in a mandatory hearing. Similar to the federal system, CDFA may call a hearing without submission of a petition for amendment to either the Milk Stabilization or Milk Pooling Plans by acting on its own motion.

There is no typical time span that separates the notice of the hearing and the hearing itself. However, during this time, a sequential series of events crucial to the process occur. First, alternative proposals to the petition are accepted. Second, CDFA holds a pre-hearing workshop to review its analysis of the original petition and any other proposals received. Third, CDFA may make revisions to the analysis of the proposals and makes the analysis and data available to the public based on discussions at the pre-hearing workshop.

At the hearing, all interested parties may offer testimony to a hearing panel to support their views. Proposals not covered by the hearing notice, however, may not be implemented as a result of the hearing. Those presenting testimony are allotted a specific amount of time. For example the original petitioner receives 60 minutes, those who submitted alternative proposals receive 30 minutes, and all others receive 20 minutes. Cross-examinations of those presenting testimony is not allowed by any interested party. The hearing panel, however, is allowed to question the witness to clarify points in the testimony. At the conclusion of the hearing, there is no comment period as with the federal system. However, any person providing testimony may be allowed to submit a post-hearing brief that explains, amplifies, or withdraws that person's testimony within a period of time not to exceed 10 days from the close of the public hearing.

If CDFA determines that the proposed plan will tend to accomplish the purposes of the Marketing and Stabilization Plan, a Plan will be issued to all producers and handlers effective within 62 days of the date of the hearing. The final decision must be announced publicly 10 days prior to its implementation, making the effective announcement date 52 days following the close of the hearing.

Producer referendum is generally not required to institute amendments to the Stabilization and Marketing Plans. The amendments to the Milk Pooling Plans may require producer approval depending on the extent of the changes to the plans. Unlike the federal system, a vote to reject pooling plan amendments does not lead to elimination of the entire marketing order.